

## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/803,063

Source: \_\_\_\_\_

Date Processed by STIC: \_\_\_\_\_

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IFWO

## RAW SEQUENCE LISTING

DATE: 10/18/2004

PATENT APPLICATION: US/10/803,063

TIME: 09:50:23

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Output Set : N:\CRF4\10182004\J803063.raw

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2      Meng, Baozhong
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4      NUCLEIC ACIDS, PROTEINS, AND THEIR USES
5 <130> FILE REFERENCE: 07678/035004
6 <140> CURRENT APPLICATION NUMBER: US/10/803,063
7 <141> CURRENT FILING DATE: 2004-03-16
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9 <151> PRIOR FILING DATE: 2000-05-09
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11 <151> PRIOR FILING DATE: 1997-05-20
12 <150> PRIOR APPLICATION NUMBER: 60/069,902
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201	tctcaaataca	tgcaagttat	tttatctttg	atcccatttt	ctgatgatcc	cacttttagg	1560
202	ccatcttcta	cagaggttaa	ccttgcacta	tcagagggtta	aggctgcgct	agaagctact	1620
203	gggcagtcaa	aattgttcag	gtttttggtg	gacgactgtg	ctatgcgtga	ggttagaagt	1680
204	tcctataagg	tgggcctttt	taagcacata	aaagccctca	ctcattgctt	taattcttgt	1740
205	ggcctccaat	ggttccctct	taggcaaagg	tccaacctca	aattttctgaa	ggacagggca	1800
206	tcgtcccttg	ctgatcttga	ttgtgaggtt	atcaaagttt	atcagcttgt	aacatcacag	1860
207	gcaatacttc	ctgaggtctt	gcttagcttg	accaaagtct	ttgtcagggg	ttctgactca	1920
208	aaggggtgtt	ccattcccag	attggtctcg	agaaatgagc	tagagggaact	agctcaccca	1980
209	gctaattcag	cccttgagga	gcctcaatca	gttgattgta	atgcaggcag	ggttcaagca	2040
210	agcgtttcaa	gttcccagca	gcttgccgac	acccactctc	ttggtagcgt	taagtcatca	2100
211	attgagacag	ctaacaaggc	ttttaacttg	gaggagctaa	ggatcatgat	tagagtcttg	2160
212	ccggaggatt	ttaactgggt	ggcgaagaac	attgggttta	aagacaggct	gagaggcagg	2220
213	ggtgcatcat	tcttctcaaa	accaggaatt	tcattgtcata	gttacaatgg	tgggagccac	2280
214	acaagcttag	ggtggccaaa	gttcatggat	cagattctaa	gctccactgg	tggacgtaat	2340
215	tactacaatt	catgcctggc	tcagatctat	gaggaaaatt	caaaattggc	tcttcataag	2400
216	gatgatgaga	gttgctatga	aattgggcac	aaagttttga	ctgttaattt	aatcggtcca	2460
217	gcaactttca	ctattagtaa	gtcgcgaaat	ttggttgggg	gtaatcattg	cagcctgaca	2520
218	attggggcaa	atgagttttt	cgaaatgcct	aggggcatgc	aatgcaatta	cttccatggg	2580
219	gtttccaatt	gtacgccagg	gcgggtatcg	ctgaccttta	ggcgccaaaa	gttgggaagat	2640
220	gatgatttga	tcttcataaa	tccacaggtg	cccattgagc	tcaatcatga	aaagcttgac	2700
221	cgaagtatgt	ggcagatggg	ccttcatgga	attaagaaat	ctatttctat	gaatggcacg	2760
222	agttttacct	cagacctatg	ctcttgtttc	tcttgccaca	actttcataa	attcaaggat	2820
223	ctcatcaata	acttgagatt	ggccctagga	gcacaagggc	taggtcagtg	tgacaggggt	2880
224	gtgtttgcaa	caacaggtcc	tggtctatct	aaggttttag	aaatgcctcg	gagcaaaaag	2940
225	caatcaattt	tggttcttga	aggtgcccta	tccatagaaa	cagattatgg	tccaaaagtc	3000
226	ctggggctct	ttgaagtttt	caaaggggac	tttcacatta	agaagatgga	ggaaggttca	3060
227	atTTTTgtaa	taacgtacaa	ggccccaatt	agatccactg	gcaggttgag	ggttcacagt	3120
228	tcagaatgct	cattttccgg	atccaaagag	gtattgctag	gctgccagat	tgaggcatgt	3180
229	gctgattatg	atattgatga	ttttaacact	ttctctgtgc	ctgggtgatg	caattgcttt	3240
230	tggcattctg	ttggtttttt	acttagcact	gatggacttg	ccctaaaggc	cggatttcga	3300
231	tctttcgtgg	agagtgagcg	cttggttaagt	ccagatcttt	cagccccagc	aatttctaaa	3360
232	caattggaag	agaatgctta	tgccgagaat	gagatgatcg	cattattctg	cattcggcac	3420
233	cacgtaaggc	ctatagtgat	cacaccagaa	tatgaagtta	gttggaattt	cggggaaggt	3480
234	gagtggcccc	tatgtggaat	tctttgcctt	aaatcaaata	acttccaacc	atgcgccccca	3540
235	ctgaatgggt	gcatgatcac	agccattgct	tcagcacttg	gaaggcgtga	agttgatgtg	3600
236	ttaaattatc	tgtgtagacc	cagcactaat	catatttttg	aggagctttg	tcagggaggg	3660
237	ggccttaaca	tgatgtattt	agctgaagct	tttgaggcct	ttgacatttg	cgctaaatgt	3720
238	gatataaatg	gagagattga	agtgattaat	cctgtgtggt	aaatttctgc	attgtttgac	3780
239	ataactaatg	agcacataag	gcatgttgag	aaaataggta	atggccctca	gagcataaaa	3840
240	gtggatgaat	tgcggaaggt	caagcgatcc	gccctcgatt	tcctttcaat	gaatgggtct	3900
241	aaaataacct	acttcccaag	ctttgagcgg	gctgaaaagt	tgcaaggatg	tttgctaggg	3960

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 10/18/2004  
PATENT APPLICATION:    US/10/803,063      TIME: 09:50:24

Input Set : N:\CrF3\RULE60\10803063.raw.txt  
Output Set: N:\CRF4\10182004\J803063.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:55; Xaa Pos. 3,4,5,7,8,9,11,12,13,14,15,17,18,19,20,21,23,24,25,26,27  
Seq#:55; Xaa Pos. 28,30,31,32,33,34,35,36,38,39,40,41,42,44,45,46,48,49,50  
Seq#:55; Xaa Pos. 51,53,54,56,57,58,65,67,68,69,81,84,86,91,92,93,94,98,100  
Seq#:55; Xaa Pos. 103,104,106,107,108,111,112,113,114,115,117,118,120,121  
Seq#:55; Xaa Pos. 122,125,126,127,129,131,132,135,136,137,139,140,141,142  
Seq#:55; Xaa Pos. 144,145,146,147,148,149,150,151,152,153,154,155,156,158  
Seq#:55; Xaa Pos. 159,160,162,163,164,166,167,169,170,171,172,173,174,175  
Seq#:55; Xaa Pos. 176,177,178,179,180,182,186,190,191,192,193,196,197,201  
Seq#:55; Xaa Pos. 202,203,205,206,207,209,210,211,213,217,219,221,222,229  
Seq#:55; Xaa Pos. 231,233,235,237,238,240,242,246,247,248,250,252,256,257  
Seq#:55; Xaa Pos. 258,262,266,267,272,273,275,278,279,280,282,284,288,290  
Seq#:55; Xaa Pos. 292,293,295,296,297,298,299,300,301,303,305,306,308,310  
Seq#:55; Xaa Pos. 311,312,313,314,316,317,318,320,321,322,323,324,325,326  
Seq#:55; Xaa Pos. 327,329,330,331,332,333,334,335,339,349,350,353,357,359  
Seq#:55; Xaa Pos. 360,361,362,364,366,369,371,373,375,376,378,379  
Seq#:59; Xaa Pos. 1,2,7,11,13,14,16,17,18,19,20,21,22,25,26,27,34,37,38,39  
Seq#:59; Xaa Pos. 40,41,42,43,44,45,46,47,48,49,50,51,52,54,56,57,58,59,60  
Seq#:59; Xaa Pos. 61,62,63,64,66,68,70,72,73,74,75,76,77,78,79,80,82,83,85  
Seq#:59; Xaa Pos. 86,89,92,97,100,101,102,103,104,105,106,107,108,109,110  
Seq#:59; Xaa Pos. 111,112,113,117,120,123,124,125,128,129,130,131,132,133  
Seq#:59; Xaa Pos. 134,135,136,137,138,139,140,142,143,144,145,147,148,149  
Seq#:59; Xaa Pos. 150,151,153,156,158,159,161,162,167,168,169,171,172,173  
Seq#:59; Xaa Pos. 175,176,177,178,179,180,181,182,183,184,185,186,187,188  
Seq#:59; Xaa Pos. 189,190,191,192,193,194,195,196,197,198,199,200,207,210  
Seq#:59; Xaa Pos. 211,213,214,215,216,217,218,219,220,221,222,223,225,232  
Seq#:59; Xaa Pos. 234,235,237,239,240,241,242,243,245,246,248,249,253,257  
Seq#:59; Xaa Pos. 260,261,262,263,264,265,266,268,269,271,272,273,274,275  
Seq#:59; Xaa Pos. 276,277,278,279,280,281,283,284,285,286,287,289,290,291  
Seq#:59; Xaa Pos. 292,293,294,295,296,297,298,299,300,301,305,306,307,308  
Seq#:59; Xaa Pos. 309,310,311,312,313,314,315,316,318,319,325,328,335,337  
Seq#:59; Xaa Pos. 338,340,342,343,344,345,347,348,349,350,351,352,353,354  
Seq#:59; Xaa Pos. 355,356,358,361,364,366,367,368,371,372,375,378,380,381  
Seq#:59; Xaa Pos. 382,383,385,388,390,392,393,394,395,396,399,400,401,403  
Seq#:59; Xaa Pos. 404,405,406,408,409,410,412,415,418,420  
Seq#:63; Xaa Pos. 6,7,8,10,11,18,22,25,27,28,30,31,32,34,35,37,38,39,42,45  
Seq#:63; Xaa Pos. 46,49,50,51,54,55,56,58,59,60,61,62,63,66,67,68,69,72,75  
Seq#:63; Xaa Pos. 79,86,91,94,95,97,99,102,106,114,115,117,121,123,124,125  
Seq#:63; Xaa Pos. 130,133,144,146,147,148,149,151,152,154,161,162,163,164  
Seq#:63; Xaa Pos. 166,167,170,171,172,173,174,176,177,178,193,196,201,202  
Seq#:63; Xaa Pos. 205,207,210,214,217,221,222,229,231,236,247,255,258,259  
Seq#:63; Xaa Pos. 260,262,264,266,275,276,279,280,281,282,283,284,285,286  
Seq#:63; Xaa Pos. 289,290,292,300,301,302,303,304,305,306,307,314,316,317  
Seq#:63; Xaa Pos. 318,320,321,325,327,328,331,332,335,337,338,341,352,353  
Seq#:63; Xaa Pos. 356,357,360,361,362,363,364,365,366,367,368,371,373,379

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 10/18/2004  
PATENT APPLICATION:    US/10/803,063      TIME: 09:50:24

Input Set : N:\Crf3\RULE60\10803063.raw.txt  
Output Set: N:\CRF4\10182004\J803063.raw

Seq#:63; Xaa Pos. 380,382,383,384  
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Seq#:67; Xaa Pos. 29,33,36,37,40,41,42,43,44,45,46,47,48,49,50,52,54,57,58  
Seq#:67; Xaa Pos. 59,60,61,62,63,65,66,68,69,70,71,72,74,75,76,77,79,80,81  
Seq#:67; Xaa Pos. 82,87,88,89,90,91,92,93,94,95,96,97,100,103,105,107,108  
Seq#:67; Xaa Pos. 109,110,111,112,114,116,117,118,119,120,121,125,126,128  
Seq#:67; Xaa Pos. 129,130,132,133,134,136,137,138,139,140,141,143,144,145



## VERIFICATION SUMMARY

DATE: 10/18/2004

PATENT APPLICATION: US/10/803,063

TIME: 09:50:24

Input Set : N:\Crf3\RULE60\10803063.raw.txt

Output Set: N:\CRF4\10182004\J803063.raw

L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
M:341 Repeated in SeqNo=55  
L:1788 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0  
M:341 Repeated in SeqNo=59  
L:2027 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0  
M:341 Repeated in SeqNo=63  
L:2249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0  
M:341 Repeated in SeqNo=67  
L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
M:341 Repeated in SeqNo=71  
L:2481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0  
M:341 Repeated in SeqNo=75  
L:2544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0  
M:341 Repeated in SeqNo=79  
L:2633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0  
M:341 Repeated in SeqNo=83  
L:2664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:0  
M:341 Repeated in SeqNo=86  
L:2695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0  
M:341 Repeated in SeqNo=89  
L:2751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0  
M:341 Repeated in SeqNo=93